

TO: Dr. H. Wakeham November 19, 1969
FROM: Fritz Will, III
SUBJECT: Puffed Tobacco in Winston Cigarettes (Code WN6-X9LI)

The attached memos describe in detail the findings to date on the puffed tobacco in Reynolds' cigarettes.

In summary, the following observations have been made:

1. Puffed lamina is about 8% by weight of the filler (by Physical Testing Lab).
2. Expansion is 107%.
3. Puffed tobacco contains both bright and burley.
4. Puffing was done after cutting.
5. Total reducing sugars was the same in puffed and unpuffed tobacco, i.e., 9%.
6. The qualitative analysis for metals (emission spec.) was the same in puffed and unpuffed tobacco.
7. Infrared Analysis - Puffed and Unpuffed Tobacco
 - a. No difference by direct internal reflectance.
 - b. No difference in residue from water extract.

Items (a) and (b) show a metallic salt of a carboxylic acid and absorption bands due to compounds such as sugars, cellulosic materials, starches, and some natural gums.

- c. The dark spots from the puffed lamina showed similar spectra as above except for the possible presence of a protein-like compound.

Further work is continuing on the chemical analysis of the tobacco.

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FW:rab

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